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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,406	08/22/2003	Tsung-Liang Lin	JCLA10428	9248
23900 7590 03/26/2007 J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618			EXAMINER DEPPE, BETSY LEE	
			ART UNIT	PAPER NUMBER
			2611	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/646,406

Applicant(s)

LIN ET AL.

Examiner

Betsy L. Deppe

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The applicant is reminded that amendments to the claims must comply with 37 CFR 1.121(c)(2), i.e. the claims must be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. In this case, the addition of "directly" to the last lines of claims 1 and 9 were not marked/underlined, as required by 37 CFR 1.121(c).

Response to Arguments

2. Applicant's arguments filed February 16, 2007 have been fully considered but they are not persuasive.

3. In response to applicant's argument on page 11 that the Robinson et al. does not teach "connecting a ground reference of the joint clock source directly to the first ground reference," clocking signal generator 40 (which is comprised of 42, 44, 56, 58, the analog portion and the digital portion) in Figure 4 of Robinson et al. corresponds to the "joint clock source" recited in the claims. Since the analog portion of clocking signal generator 40 is directly connected to "AGND," this reference in combination with Isley, Jr. et al. reads on claims 1 and 9.

4. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the crystal oscillator connected to the analog ground reference in Figure 3) are not recited in claims 1 and 9. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Objections

5. Claims 5 and 13 are objected to because of the following informalities: on the last line of each claim, a comma should be inserted after "modulated". Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1, 2, 5, 7-10, 13, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al. (US Patent No. 5,930,295 cited in the Office Action mailed November 24, 2006) in view of Robinson et al. (US Patent No. 5,943,290 cited in the Office Action mailed November 24, 2006).

8. With regard to claims 1 and 9, Figure 1 of Isley, Jr. et al. discloses the claimed invention including a medium within which a communication signal propagates through

Art Unit: 2611

(14), an analog circuit (e.g. any of the components that are part of 18), a digital circuit (20), an analog interface circuit (28) and a digital interface circuit (34). (See column 2, line 42- column 3, line 13 and column 4, lines 20-41). However, Isley, Jr. et al. does not disclose a first ground reference, a second ground reference, and a joint clock source.

Figure 1 of Robinson et al. discloses an integrated circuit with a joint clock source that provides signals to an analog circuit (12) and a digital circuit (14) wherein the analog circuit has a first ground reference (AGND), the digital circuit has a second ground reference (DGND) and the joint clock source connected to the first ground reference (see Figure 4). (See column 1, lines 19-23; column 2, lines 1-26; column 3, lines 63-67; and column 4, line 65 - column 5, line 3) Since it is implicit that the transceiver/modem of Isley, Jr. et al. requires clocking signals, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Robinson et al. with Isley, Jr. et al. by implementing the transceiver of Isley, Jr. et al. as an integrated circuit with the separate ground references as taught by Robinson et al. in order to reduce the size of the transceiver while minimizing the noise between the digital and analog portions of the integrated transceiver circuit.

9. With regard to claims 2 and 10, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including an antenna and propagating the signal through the air. (See Isley, Jr. et al., "14" in Figure 1)

10. With regard to claims 5 and 13, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a switch (36), a downconverter (26), an upconverter (32) and a synthesizer (24). (See Isley, Jr. et al., Figure 1)

Art Unit: 2611

11. With regard to claims 7 and 15 Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including an analog-to-digital convertor. (See Isley, Jr. et al., "28" in Figure 1)

12. With regard to claims 8 and 16, Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a digital-to-analog convertor. (See Isley, Jr. et al., "34" in Figure 1)

13. Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al in view Robinson et al. as applied to claims 1 and 9, respectively, above, and further in view of Hoobler (US Patent No. 7,130,337 B2 cited in the Office Action mailed November 24, 2006). Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention except for propagating the communication signal through a wire.

Hoobler discloses that modems may be used in RF (i.e. over the air) systems or in power line systems (i.e. over a wire). (See column 3, lines 62-63) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention disclosed by Isley, Jr. et al. in view of Robinson et al. in order to reduce noise of modems in wired communication systems. Whether the modem is implemented in a RF or wired communication system does not affect the functionality or operability of the modem.

14. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al in view Robinson et al. as applied to claims 1 and 9, respectively, above, and further in view of Kato (US Pub. No. 2002/0135432 A1). Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention except connecting the ground reference of the crystal oscillator directly to the first ground reference.

Figure 1 of Kato discloses connecting a crystal oscillator directly to ground. It would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the XTAL in Robinson et al. in order for the oscillator to provide a stable and accurate frequency.

15. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isley, Jr. et al in view Robinson et al. as applied to claims 1 and 9, respectively, above, and further in view of Sorrells et al. (US Pub. No. 2004/0013177 A1 cited in the Office Action mailed November 24, 2006). Isley, Jr. et al. in view of Robinson et al. discloses the claimed invention including a baseband processor for digital signal processing. (See Isley, Jr. et al., Figure 1, "20"). However, Isley, Jr. et al. in view of Robinson et al. does not teach a MAC unit.

Figure 3B of Sorrells et al. shows an integrated transceiver (322) interfacing with a MAC unit (112). Since the protocol or standard to the communication system does not affect the functionality or operation of the integrated transceiver circuit, it would have been obvious matter of design choice to one of ordinary skill in the art at the time the invention was made to implement the method or circuit disclosed by Isley, Jr. et al. in

Art Unit: 2611

view of Robinson et al. in a system that operates in accordance with such as IEEE 802.11 standards in order to optimize the performance of such a system by reducing noise caused by an integrated transceiver. Furthermore, in order for the integrated transceiver circuit to properly interface with controller of such a system, it is implicit that a MAC unit must be connected to the integrated transceiver circuit. (See Sorrells et al., paragraphs [0045]-[0046])

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2611

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppé whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Tuesday and Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Betsy L. Deppé
Primary Examiner
Art Unit 2611